

AIMS PressCorpsRelSprdsheetRqmts v1.0

Date: 7/21/2008

Page: 1 of 14

Arizona Department of Education

Research and Evaluation AIMS Press Corps Release Spreadsheet

AIMS Press Corps Release Business Requirements v1.0

R&E must provide to State Media Office on 1 August 2008 for AZ press corps distribution

Arizona Department of Education
Information Technologies Department
PMO-Jim Whelan
PM – Myrna Johnson
IT Development Director – Larry Lindain
IT Specialist III – Steve Cimino
Developer – Zakir Mohammed
BA Manager – Shane Crabtree
BA – Pedro Morales



AIMS PressCorpsRelSprdsheetRqmts v1.0

Date: 7/21/2008

Page: 2 of 14

Abstract

R&E releases an AIMS spreadsheet that is exclusively for the press. This spreadsheet is not available to the public via the Student Report Card (SRC) or ADE web site applications.



AIMS PressCorpsRelSprdsheetRqmts v1.0 Date: 7/21/2008 Page: 3 of 14

Prepared by	Pedro Morales
Stakeholders	Research & Evaluation, ADE, ADE, AZ LEAs/Schools, AZ Public, AZ Press
	Corps, Federal Educational Agencies

Approvals

Version	Date	Name	Role/Entity	Approval	Remarks
1.0	073008	Robert Franciosi	Deputy Superintendent, R&E, ADE	RJF	Match to student list Exclude mods for years <2008
1.0		Jim Whelan	PMO, IT, ADE		
1.0		Larry Lindain	ADE, IT Development Director		

Revision (Rev) Log

All revisions to this Requirements Specification will be documented in this log to include Revision (Rev) #, Date, Description of revision, originator of revision/modification designated by change symbol - Δ , and Name of editor. The initial draft document will be numbered v0.01 and incremented when revisions are made. The document that is approved will be v1.0.

Rev	Date	Description	∆ by	Editor Name
.01	072108	Initial draft	N/A	pmorales
.02	072208	Modified section I.c.i to include schools	N/A	pmorales
.03	072208	Included server information storing press release spreadsheet table data, sec IX.A.	pmorales	pmorales
.04	072208	Clarified use of categories in aggregations, sec IX.C.ii.	AKuriakose	pmorales
.05	072308	Include information on DTS package responsible for populating ApdwAIMSReport table, sec IX.F.	pmorales	pmorales
.06	072308	Include AIMS and AIMS-A and incorporation of press release aggregation logic for SRC rules in sec IX.C.1).	RFranciosi	pmorales
.07	072508	Reassigned to Dbase team, MCruz, as spreadsheet data should be from the EDEN db. Dev populating tables from CBT, not EDEN.	MJohnson	pmorales
.08	073008	Reassigned to Dev, SCimino. MCruz found EDEN db #s not reliable.	RFranciosi	pmorales



AIMS PressCorpsRelSprdsheetRqmts v1.0

Date: 7/21/2008

Page: 4 of 14

Table of Contents

I.	Purpose6
II.	Overview6
III.	Background
IV.	RASCI Chart6
V.	Assumptions and Constraints
VI.	Dependencies, Risks, and Issues
VII.	Scope
VIII.	Security
A	Invalidated Input
В	Broken Authentication and Session Management
С	Cross Site Scripting
D	Buffer Overflow
E.	Injection Flaws
F.	Improper Error Handling
G	Log On/Access
Н	Persistent Cookies
1.	Secure Socket Layer (SSL)
J.	Log Out
K.	Inactivity Disconnect
L.	Simultaneous Logins
M	. Mask Developer Comments in Application Code
N	Encrypt Connect Information
0	Database Audit Log10
Ρ.	Administrator Passwords
IX.	Press Spreadsheet Business Requirements
Α.	General11
B.	Percentages11



AIMS PressCorpsRelSprdsheetRqmts v1.0

Date: 7/21/2008

Page: 5 of 14

C.	Aggregations	12
1)	Aggregations results aggregations	12
2)	Aggregations will not be presented	12
D.	Flat record (file)	12
1)	Grade	12
2)	Number Tested	12
3)	Mean Scale Score (MSS)	12
4)	Percent in each performance category	12
E.	Data.	12
F.	DTS Package	13



AIMS PressCorpsRelSprdsheetRqmts v1.0 Date: 7/21/2008 Page: 6 of 14

I. Purpose

Provide AIMS 2007 & 2008 spreadsheets for the AZ press no later than 01 August 2008.

II. Overview

Research and Evaluation provides an annual spreadsheet to the press outlining the AIMS and AIMS-A results by grade and subject.

III. Background

N/A

IV. RASCI Chart

* Authorize R Responsible A Accountable S Supports C Consulted I Informed Cu Customer Support

Name	Position	*	R	A	S	C	1	Cu	Remarks
Tom Horne	ADE Superintendent	V		V					
John Stoller	Education Associate Superintendent	Т					V		
Adria Lugo	Director Special Projects & Constituent Services						V		
Robert Franciosi	Deputy Associate Superintendent	V		V		V			
Anju Kuriakose	Director of Accountability Systems & Reports	V		V		V			
Aleks Kadijevic	Administrative Assistant, R&E							V	
Joshua Sheffield	Administrative Assistant, R&E							V	
Steve Cimino	Info technology Specialist 3				V				
Zakir Mohammed	Developer	Т			V				
Myrna Johnson	Project Manager	Т			V				
Pedro Morales	Business Analyst				V				
	-								
		Π							



AIMS PressCorpsRelSprdsheetRqmts v1.0

Date: 7/21/2008

Page: 7 of 14

V. Assumptions and Constraints

AIMS and AIMS-A table data is accurate – table validity.

VI. Dependencies, Risks, and Issues

None known.

VII. Scope

In scope.

VIII. Security

This is a straight internal data pull of publically available information with no public internet/web application, front or back end, involvement.

A. Invalidated Input

Information from web requests is not validated before being used by a web application. Attackers can use these flaws to attack backend components through a web application.

B. Broken Authentication and Session Management

Account credentials and session tokens are not properly protected. Attackers that can compromise passwords, keys, session cookies, or other tokens can defeat authentication restrictions and assume other users' identities.

C. Cross Site Scripting

The web application can be used as a mechanism to transport an attack to an end user's browser. A successful attack can disclose the end user's session token, attack the local machine, or spoof content to fool the user. Applications must not be able to intrude on the application without logging on as an authorized user.



AIMS PressCorpsRelSprdsheetRqmts v1.0

Date: 7/21/2008

Page: 8 of 14

D. Buffer Overflow

Web application components in some languages that do not properly validate input can be crashed and, in some cases, used to take control of a process. These components can include CGI, libraries, drivers, and web application server components.

E. Injection Flaws

Web applications pass parameters when they access external systems or the local operating system. If an attacker can embed malicious commands in these parameters, the external system may execute those commands on behalf of the web application.

F. Improper Error Handling

Error conditions that occur during normal operation are not handled properly. If an attacker can cause errors to occur that the web application does not handle, they can gain detailed system information, deny service, cause security mechanisms to fail, or crash the server.

G. Log On/Access

Users will be required to log in every time they use the application. The ADE Security component of Common Logon defines the security standards that apply to the application access as does ADE Acceptable Use policy. Only users that are authorized for access are granted permission to log in. The ability to read and/ or write data is governed by the user role. Each user is assigned their own user code / password combination to gain access to the application. Passwords are meant to be used only by individual users. Passwords are neither "borrowed" from another user nor to be shared with others. Any persons who need access to the ADE secure systems should gain that access only by using their own password. The ADE Acceptable Use policy can be located at the following link: https://www.azed.gov/mis/aup.htm



AIMS PressCorpsRelSprdsheetRqmts v1.0

Date: 7/21/2008

Page: 9 of 14

H. Persistent Cookies

The application may not be opened using a "cookie" stored from a previous logon session.

I. Secure Socket Layer (SSL)

Sensitive information exchanged over the public internet must remain secure.

J. Log Out

The application logs out the users as soon as they navigate outside the application from a session. The user must logon again to return to the application.

K. Inactivity Disconnect

If the application remains idle for a pre-determined amount of time, the user will be disconnected from the logon session and must log in again when ready to continue utilizing the Web features.

L. Simultaneous Logins

A user is prevented from logging on to the application more than once at any given time.

M. Mask Developer Comments in Application Code

Comments written into the application programming code by a software programmer will not be readable will not be readable for a General User.

N. Encrypt Connect Information

The application does not provide information to the general user that identifies where the application data is stored.



AIMS PressCorpsRelSprdsheetRqmts v1.0

Date: 7/21/2008

Page: 10 of 14

O. Database Audit Log

The application provides historical information how every record has been changed, who initialed the change and when the change occurred.

P. Administrator Passwords
The application requires that the Server Administrator uses a secure password.



AIMS PressCorpsRelSprdsheetRqmts v1.0

Date: 7/21/2008

Page: 11 of 14

IX. AIMS Press Spreadsheet Business Requirements

A. General

AIMS press release spreadsheet shall have the following thirty fields (cells) as column headings along with results for each of the three AIMS and AIMS-A subject areas.

ield #	Field	AIMS Performance Level Info	Datatype	Remarks
1	Year	2007 - 2008	num (4)	e.g. 2008, provide for past two years
2	State	N/A	char (8)	State = Arizona
3	County	N/A	char (33)	"Arizona Department of Corrections" longest name
4	District CTDS Number	N/A	num (9)	no leading zeroes or dashes
5	District Entity ID	N/A	num (6)	no leading zeroes or dashes
6	District Name	N/A	nvarchar(max)	
8	School CTDS	N/A	num (9)	no leading zeroes or dashes
9	School Entity ID	N/A	num (6)	no leading zeroes or dashes
10	CharterSchool	N/A	char (3)	YES, NO indicator if charter school
11	School Name	N/A	nvarchar(max)	
12	Grade	N/A	alphanum (3)	display one of fol grades 3, 4, 5, 6, 7, 8, 10, 11, 12, or AL
13	MNT	Mathematics Number Tested	smallint	if MNT #<10, then MNT =*, else smallint
14	MMSS	Mathematics Mean Scale Score	smallint	if MNT #<10, then MMSS =*, else smallint
15	MFFB	Mathematics Falls Far Below	smallint	if MNT #<10, then MFFB =*, else smallint
16	MA	Mathematics Approaches	smallint	if MNT #<10, then MA =*, else smallint
17	MM	Mathematics Meets	smallint	if MNT #<10, then MM =*, else smallint
18	ME	Mathematics Exceeds	smallint	if MNT #<10, then ME =*, else smallint
19	RNT	Reading Number Tested	smallint	if RNT #<10, then RNT =*, else smallint
20	RMSS	Reading Mean Scale Score	smallint	if RNT #<10, then RMSS =*, else smallint
21	RFFB	Reading Falls Far Below	smallint	if RNT #<10, then RFFB =*, else smallint
22	RA	Reading Approaches	smallint	if RNT #<10, then RA =*, else smallint
23	RM	Reading Meets	smallint	if RNT #<10, then RM =*, else smallint
24	RE	Reading Exceeds	smallint	if RNT #<10, then RE =*, else smallint
25	WNT	Writing Number Tested	smallint	if WNT #<10, then WNT =*, else smallint
26	WMSS	Writing Mean Scale Score	smallint	if WNT #<10, then WMSS =*, else smallint
27	WFFB	Writing Falls Far Below	smallint	if WNT #<10, then WFFB =", else smallint
28	WA	Writing Approaches	smallint	if WNT #<10, then WA =*, else smallint
29	WM	Writing Meets	smallint	if WNT #<10, then WM =*, else smallint
30	WE	Writing Exceeds	smallint	if WNT #<10, then WE =*, else smallint

B. Percentages.

All percentages to be represented as whole numbers



AIMS PressCorpsRelSprdsheetRqmts v1.0

Date: 7/21/2008

Page: 12 of 14

C. Aggregations

- AIMS results aggregations shall be at the state, district, county, and school levels for AIMS and AIMS-A and AIMS press release logic will become the SRC aggregation rules. Spreadsheet to be presented without a category breakdown – see sec IX.C.2) below.
- Aggregations will not be presented by category 1 as in previous year i.e. cat0 unknown?, cat 1 FEP, cat 2 ELL, cat 3 SPED AIMS, and cat 4 AIMS-A.
- Flat record (file) to be provided for each of the three AIMS and AIMS-A subjects by
 - 1) Grade
 - 3) Number Tested
 - 4) Mean Scale Score (MSS)
 - 5) Percent in each performance category
 - a) FFB (Falls Far Below)
 - b) A (Approaches)
 - c) M (Meets)
 - d) E (Exceeds)

E. Data.

Provide a press release AIMS spreadsheet for 2008 and 2007.

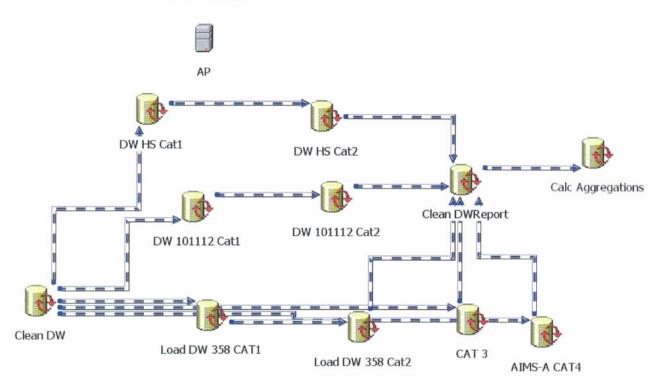


AIMS PressCorpsRelSprdsheetRqmts v1.0

Date: 7/21/2008

Page: 13 of 14

F. DTS Package



Aforementioned DTS package, proddata8\Data Transformation Services\Local Packages\APReportWizard_PROD, populates the ApdwAIMSReport table used to produce the press release spreadsheet. This DTS package should be converted/upgraded as support for DTS will eventually be discontinued in future MS SQL server releases.



AIMS PressCorpsRelSprdsheetRqmts v1.0

Date: 7/21/2008

Page: 14 of 14

References

Press Spreadsheet 2007 Avail: Research & Evaluation, 4th Floor, 1535 W Jefferson, Phoenix, AZ 85048 ADE